

Pertussis Rapid Clinical Reference

1 October 2004

Classic pertussis consists of cough lasting over 2 weeks with paroxysms, whoop, or post-tussive vomiting. However, *in an outbreak situation*, pertussis should be suspected with:

- any acute cough illness lasting 7 or more days
- any acute cough illness with either paroxysmal cough or inspiratory whoop
- any acute cough illness in a person with >1hr contact to a confirmed or probable case
- any cough associated with apnea in an infant

Management Guide for all suspect pertussis (i.e., anyone meeting the above definition):

- 1. **Treat** all suspect cases with appropriate antibiotics.
- 2. **Test** all as-yet-untested cases with NP swab PCR, but do not delay treatment while waiting for results.
- 3. **Isolate** from school or work until 5 days of antibiotics have been completed or PCR returns negative.
- 4. **Manage contacts** by providing antibiotic prophylaxis to all *known*, *close*, *prolonged* (>1hr) contacts at home. If cough >14 days, link to known case, or positive test, provide antibiotic <u>prophylaxis</u> to all *known*, *close*, *prolonged* (>1hr) institutional contacts (e.g., work, school) - otherwise, recommend <u>symptom monitoring</u> for persons with reasonable potential to have institutional contact. Test contacts <u>only</u> if they have developed cough symptoms.
- 5. **Report** all suspect, probable, and confirmed cases: In Waukesha County call 262-896-8430. In Milwaukee County call 414-286-3606 (SurvNet).

Antibiotic Recommendations for treatment and for prophylaxis:

Azithromycin

10-12 mg/kg/day orally in one dose for 5 days; maximum of 600 mg/day for 5 days (i.e., adult dose is 500-600 mg once daily for 5 days). The "Zithromax Z-pack" (500mg x1d, then 250mg/d x4d) is not yet CDC-approved but may be sufficient.

Clarithromycin

15-20 mg/kg/day orally in two divided doses for 7 days; maximum of 1g/day for 7 days (i.e., adult dose is 500mg bid for 7 days). Clarithromycin 250mg bid x7 days is not yet CDC-approved but may be sufficient.

Erythromycin estolate

For children: 40-50 mg/kg per day orally in 4 divided doses for 14 days

For adults: 1 to 2 g/day orally in 4 divided doses for 14 days (i.e., 250-500mg qid x14d - - 500mg qid

is preferred if tolerated)

Trimethoprim-Sulfamethoxazole (TMP-SMZ) (Recommended for treatment and prophylaxis for patients who cannot tolerate erythromycin or other macrolides)

For children: trimethoprim 8 mg/kg/day, sulfamethoxazole 40 mg/kg/day in two divided doses x14 days trimethoprim 320 mg/day, sulfamethoxazole 1600 mg/day in two divided doses for 14 days

(e.g., Bactrim DS one bid for 14 days)

Notes on Testing

Positive results are extremely reliable for both culture and PCR tests. Negative culture results are unreliable. Negative PCR results are reliable from an NP swab taken from a symptomatic person up to day 7 of cough or day 4 of antibiotics - - after that sensitivities are too low to rule out prior pertussis, but they are still useful to confirm that the person is *no longer* infectious.

For additional information contact your local Health Department, or see www.milwaukee.gov/health or www.dhfs.wisconsin.gov/immunization/pertussis2.

PERTUSSIS OUTBREAK – CLINICAL POCKET GUIDE



Pertussis should be suspected with:

- any acute cough illness lasting 7 or more days
- any acute cough illness with either paroxysmal cough or inspiratory whoop
- any acute cough illness in a person with >1hr contact to a probable case
- any cough associated with apnea in an infant

For anyone meeting the above definition:

- **Treat** with appropriate antibiotics; don't wait for test results.

 Recommended antibiotics include azithromycin, clarithromycin, and erythromycin estolate. Trimethoprim-sulfamethoxazole is an appropriate alternative.
- **Test** all as-yet-untested cases with NP swab PCR.
- **Isolate** from school or work until 5 days of antibiotics have been completed.
- **Prophylax** all *known*, *close*, *prolonged* (>1hr) contacts with recommended antibiotics.
- **Report** all suspect, probable, and confirmed cases: In Waukesha County call 262-896-8430. In Milwaukee County call 414-286-3606 (SurvNet).

<u>Testing Note</u>: Pertussis PCRs taken after day 7 of cough (or day 4 of antibiotics) have lower sensitivities - - they are *very useful* to "rule in" pertussis, but too late to rule it out, although negative PCRs do confirm that the person is *no longer* infectious.

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